

Notice of Allowability

Application No.

08/876,132

Examiner

Daniel M Sullivan

Applicant(s)

FOWLER ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Paper filed 25 January 2005.
2. ☒ The allowed claim(s) is/are 21-24,26,29,31-35 and 39-43.
3. ☒ The drawings filed on 29 December 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Amend the claims as follows:

22. (Previously ~~added~~presented): The method according to claim 21, wherein the progenitor strain is capable of producing 2,5-diketo-D-gluconate from a carbon source.
23. (Previously ~~added~~presented): The method according to claim 21, wherein the progenitor strain is a recombinant strain that comprises a heterologous nucleic acid sequence encoding a 2,5,-diketo-D-gluconate reductase and is capable of converting 2,5-diketo-D-gluconate to 2-keto-L-gluconic acid.
24. (Previously ~~added~~presented): The method according to claim 21, wherein an open reading frame of the nucleic acid sequence of the cryptic plasmid encodes an amino acid sequence having the sequence of SEQ ID NO:3.
26. (Previously ~~amended~~presented): The method according to claim 21, wherein the cryptic plasmid has the nucleic acid sequence shown in SEQ ID NO:1 and SEQ ID NO:2.

29. (Previously ~~amended~~presented): A method for reducing the mobilization properties of plasmids residing within an *Enterobacteriaceae* strain comprising,

a) obtaining an *Enterobacteriaceae* progenitor strain from the genera of *Pantoea*, *Enterobacter*, *Erwinia* or *Gluconobacter*, which includes a cryptic plasmid having a nucleic acid sequence of at least 95% sequence identity with SEQ ID NO:1 and SEQ ID NO:2, and

b) eliminating the cryptic plasmid.

31. (Previously ~~added~~presented): The method according to claim 29, wherein the progenitor strain is capable of producing 2,5-diketo-D-gluconate from a carbon source.

32. (Previously ~~added~~presented): The method according to claim 29, wherein the progenitor strain is a recombinant strain that comprises a heterologous nucleic acid sequence encoding a 2,5-diketo-D-gluconate reductase and is capable of converting 2,5-diketo-D-gluconate to 2-keto-L-gluconic acid.

34. (Previously ~~amended~~presented): The method according to claim 33, wherein the *Pantoea* progenitor strain is a *Pantoea citrea* strain.

35. (Previously ~~amended~~presented): The method according to claim 33, wherein the *Pantoea* progenitor strain is a recombinant strain.

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39. (Previously ~~added~~presented): The method according to claim 21, wherein said improved strain is a *Pantoea* strain.

42. (Previously ~~added~~presented): The method according to claim 41, wherein the *Pantoea* progenitor strain is a *P. citrea* strain.


43. (Previously ~~added~~presented): The method according to claim 41, wherein the improved *Pantoea* strain is able to grow at a higher temperature than the progenitor strain.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel M Sullivan whose telephone number is 571-272-0779. The examiner can normally be reached on Monday through Thursday 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Remy Yucel, Ph.D. can be reached on 571-272-0781. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel M. Sullivan, Ph.D.
Examiner
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DAVID GUZZI
PRIMARY EXAMINER